

Appl. No. 09/891,138
Amdt. dated October 15, 2003
Reply to Office Action of April 15, 2003

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Amendments to the Specification:

Please replace paragraph the paragraph beginning on page 5, line 30 bridging to page 6, line 2 with the following amended paragraph:

In another aspect, the present invention provides a method of detecting the presence of an TGR-GPCR or an endothelial differentiation gene (EDG)-EDG-GPCR nucleic acid or polypeptide in human tissue, the method comprising the steps of: (i) isolating a biological sample; (ii) contacting the biological sample with a TGR-GPCR-specific reagent or a EDG-GPCR-specific reagent that selectively associates with an TRG-GPCR nucleic acid or polypeptide or a EDG-GPCR nucleic acid or polypeptide; and, (iii) detecting the level of TGR-GPCR-specific reagent or EDG-GPCR-specific reagent that selectively associates with the sample.

Please replace paragraph the paragraph beginning on page 19, line 8 bridging to page 20, line 2 with the following amended paragraph:

A preferred example of algorithm that is suitable for determining percent sequence identity and sequence similarity are the BLAST and BLAST 2.0 algorithms, which are described in Altschul *et al.*, *Nuc. Acids Res.* 25:3389-3402 (1997) and Altschul *et al.*, *J. Mol. Biol.* 215:403-410 (1990), respectively. BLAST and BLAST 2.0 are used, with the parameters described herein, to determine percent sequence identity for the nucleic acids and proteins of the invention. Software for performing BLAST analyses is publicly available through the National Center for Biotechnology Information (<http://www.ncbi.nlm.nih.gov/>). This algorithm involves first identifying high scoring sequence pairs (HSPs) by identifying short words of length W in the query sequence, which either match or satisfy some positive-valued threshold score T when aligned with a word of the same length in a database sequence. T is referred to as the neighborhood word score threshold (Altschul *et al.*, *supra*). These initial neighborhood word hits act as seeds for initiating searches to find longer HSPs containing them. The word hits are extended in both directions along each sequence for as far as the cumulative alignment score can

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be increased. Cumulative scores are calculated using, for nucleotide sequences, the parameters M (reward score for a pair of matching residues; always > 0) and N (penalty score for mismatching residues; always < 0). For amino acid sequences, a scoring matrix is used to calculate the cumulative score. Extension of the word hits in each direction are halted when: the cumulative alignment score falls off by the quantity X from its maximum achieved value; the cumulative score goes to zero or below, due to the accumulation of one or more negative-scoring residue alignments; or the end of either sequence is reached. The BLAST algorithm parameters W, T, and X determine the sensitivity and speed of the alignment. The BLASTN program (for nucleotide sequences) uses as defaults a wordlength (W) of 11, an expectation (E) of 10, M=5, N=-4 and a comparison of both strands. For amino acid sequences, the BLASTP program uses as defaults a wordlength of 3, and expectation (E) of 10, and the BLOSUM62 scoring matrix (*see Henikoff & Henikoff, Proc. Natl. Acad. Sci. USA 89:10915 (1989)*) alignments (B) of 50, expectation (E) of 10, M=5, N=-4, and a comparison of both strands.